

REMARKS

Applicants respectfully request that the above-identified application be reexamined.

The March 9, 2006, Office Action ("Office Action") rejected all of the claims in this application. In addition, Claim 33 was objected to because it depended from Claim 34. The Office Action noted the claim had been treated as depending from Claim 31. Since this amendment cancels Claim 33, this objection has been rendered moot and will not be discussed further.

As noted above, the Office Action rejected all the claims of this application. Claims 1, 5-10, 21, 25-30, and 38-39 were rejected under 35 U.S.C. § 103 as being unpatentable in view of the teachings of U.S. Patent No. 6,751,794 (McCaleb et al.), taken in view of the teachings of U.S. Patent Publication No. 2004/0031030 (Kidder et al.). Claims 2-4, 11-20, 22-24, and 31-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of McCaleb et al., taken in view of the teachings of Kidder et al., taken further in view of the teachings of U.S. Patent Publication No. 2003/0090531 (Wong et al.). While applicants disagree with the foregoing rounds of rejection, in order to advance the prosecution of this application, a variety of amendments have been made to the claims. In addition, Claims 14, 17, and 31-37 have been canceled. The subject matter of Claim 14 has been incorporated into Claim 11. Applicants respectfully submit that the claims, as amended, are clearly allowable in view of the teachings of the cited and applied references.

Prior to discussing in detail why applicants believe that all the claims in this application are allowable, a brief description of the disclosed subject matter and brief descriptions of the teachings in the cited and applied references are provided. The following discussions of the disclosed subject matter and the cited and applied references are not provided to define the scope or interpretation of any of the claims of this application. Instead, these discussions are provided

to help the United States Patent and Trademark Office better appreciate important claim distinctions discussed thereafter.

Disclosed Subject Matter

A standard schema for creating a log containing information regarding applications installed on and services provided by a computer is disclosed. An agent inventories a computer to identify installed applications and provided services. The agent outputs a report, called a log file, that conforms to the schema standard. A calculation performed on a subset of the attributes stored in the log file related to an application or service causes the generation of a signature that represents the subset. The signature is also stored with the log file. The signature(s) allow an inquirer to quickly determine whether or not the related application or services is a particular application or service. The signature(s) can also be used to quickly determine whether an application is a particular version of the application.

U.S. Patent No. 6,751,794 (McCaleb et al.)

McCaleb et al. is directed to an intelligent patch checker. More specifically, McCaleb et al. purportedly discloses a method for remotely updating software on a plurality of clients. A client sends a request for an upgrade to a server. The request includes a unique identification that is recognized by the server as belonging to the client. In response, the server sends an instruction to the client that directs the client to collect application information about the software application installed on the client. The client sends the application information to the server. The server performs a comparison between the application information about the software application and the most updated upgrade package for the software application. The server sends the most updated upgrade package for the software application to the client.

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Other than gathering client information, McCaleb et al. has little relationship to the present invention. McCaleb et al. does not disclose generating a log file that contains information about installed applications or provided services. Nor does McCaleb et al. disclose or even remotely suggest employing a subset of attributes associated with such applications or services to generate a signature representing the subset. As noted above, such a subset allows an inquirer to quickly access information that allows the inquirer to determine whether the application or service that is the subject of an inquiry is a particular application or service. Moreover, McCaleb et al. has no need to produce such signatures since McCaleb et al. clients respond to server instructions to collect application-specific information.

Published Patent Application No. 2004/0031030 (Kidder et al.)

Kidder et al. purportedly discloses signatures for facilitating hot upgrades of modular software components. More specifically, Kidder et al. purportedly discloses a method and apparatus for facilitating hot upgrades of software components within a telecommunications network device through the use of "signatures" generated by a signature generating program. After installation of a new software release within the network device, only those software components whose signatures do not match the signatures of corresponding and currently executing software components are upgraded. Signatures promote hot upgrades by identifying only those software components that need to be upgraded. Since signatures are automatically generated for each software component as a part of putting together a new release, a quick comparison of two signatures provides an accurate assessment that either the software component has changed or has not. Thus, signatures provide a quick, easy way to accurately determine the upgrade status of each software component.

Other than disclosing the use of signatures in connection with software components, Kidder et al. bears substantially no relationship to the present invention as far as applicants have

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been able to determine. Kidder et al. does not disclose generating a log file that contains information about installed applications or provided services. Nor does Kidder et al. suggest employing a subset of attributes associated with such applications or services to generate a signature representing the subset.

U.S. Patent Publication No. 2003/090531 (Wong et al.)

Wong et al. is purportedly directed to a digital data preservation system. More specifically, Wong et al. purportedly discloses a digital preservation system for accepting a digital data record as input, for writing the data record in human-readable form onto a preservation-quality medium, for storage of the medium, and for retrieval of the data record from the medium. The system is modular, allowing scaling of the system, allowing preferential selection of specific image handling components, and allowing replacement of complete subsystems while minimizing the likelihood of data loss. The digital preservation system preserves a data record in human-readable form, along with an associated metadata record, allowing the human-readable preserved data record to be readable in the distant future, independent of specific reading hardware.

Wong et al. was cited for its alleged disclosure of storing an XML file. Other than this broad disclosure, as far as applicants have been able to determine, Wong et al. has little, if any, relationship to the present invention.

Claims 1, 5-10, 21, 25-30, and 38-39

The Office Action rejected Claims 1, 5-10, 21, 25-30, and 38-39 under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of McCaleb et al., taken in view of the teachings of Kidder et al. Of these claims, Claims 1, 21, and 38 are independent claims. As amended, Claim 1 reads as follows:

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1. A computer-implemented method of collecting and storing information about the programs installed on and the services provided by a computer for subsequent retrieval, comprising:

(a) extracting from the computer system information including, but not limited to, information about the computer operating system, hardware, and processor and storing the system information in a log file;

(b) extracting from the computer executables information including, but not limited to, information about executables included in a defined set of folders stored on the computer and executables associated with services provided by the computer and storing the executables information in the log file, the executables information including attributes determined by the executables;

(c) extracting from the computer information regarding the application programs installed on the computer including linked executables and storing the application program information in the log file, the application program information including attributes determined by the application programs including the linked executables; and

(d) deriving a signature for each of the executables based on a subset of the attributes associated with the executable and storing the resultant signatures in the log file.

Applicants respectfully submit that neither McCaleb et al. nor Kidder et al., taken alone or in combination, teaches the subject matter of Claim 1. Moreover, applicants respectfully submit that, as discussed more fully below, the Office Action has not established a *prima facie* basis of obviousness regarding combining the teachings of McCaleb et al. and Kidder et al. More specifically, neither McCaleb et al. nor Kidder et al., taken alone or in combination, teaches or discloses extracting from a computer system information, computer executables information, and information regarding the applications and programs installed on the computer of the type recited in Claim 1 and storing the resultant information in a log file. Nor does McCaleb et al. or Kidder et al. disclose deriving signatures for executables based on a subset of attributes associated with the executables and storing the information in the log file. In this regard, while Kidder et al. purportedly discloses the generation of signatures, Kidder et al. does not disclose deriving a signature for an executable that is based on a subset of the attributes

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associated with the executable and storing the resultant signature in a log file. As a result, applicants respectfully submit that Claim 1 is clearly allowable.

As noted above, applicants also submit that the Office Action has failed to establish a *prima facie* case of obviousness with regard to combining the teachings of McCaleb et al. and Kidder et al. More specifically, in order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Additionally, the prior art references must teach or suggest **all** of the claim limitations. The teaching or suggestion to make the claim combination must be found in the prior art and not be based on applicants' disclosure (M.P.E.P. § 2142, rev. 2, May 2004). In this regard, the Office Action states that:

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to upgrade application software in a timely manner to prevent errors and potential network device crashes due to applications not being upgraded . . .

(Citing paragraph 458, lines 4-6, presumably of Kidder et al.) Applicants respectfully disagree. The generation of signatures and storing them in a log has nothing to do with preventing errors and potential network crashes due to applications not being upgraded. In this regard, one of the objectives of the signatures generated by the referenced invention is, as noted above, to allow an inquirer to quickly determine if an application is a particular application or a particular resource.

In summary, applicants respectfully submit that Claim 1, as amended, is clearly allowable in view of the teachings of McCaleb et al. and Kidder et al. Applicants further submit that all of the claims dependent from Claim 1 included in this set of claims (5-10) are also allowable for at least the same reasons that Claim 1 is allowable.

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As noted above, Claim 21 is also an independent claim. As amended, Claim 21 reads as follows:

21. A computer-implemented method of collecting and storing information about the applications installed on and the services provided by a computer for subsequent retrieval, comprising:

enumerating executables associated with each application installed on and each service provided by the computer that has an associated executable;

for each executable, extracting information about the executable, the information including a plurality of attributes regarding the executable; and

deriving a signature for a combined set of attributes including attributes from each of the executables.

For generally the same reasons discussed above with respect to Claim 1, the subject matter of Claim 21 is not taught or suggested by McCaleb et al. or Kidder et al. Neither reference is directed to a computer-implemented method of collecting and storing information about the applications installed on and the services provided by a computer for subsequent retrieval. Neither of the references teaches or suggests enumerating executables associated with each application installed on and each service provided by the computer that has an associated executable. Nor does either reference teach, for each executable, extracting information about the executable, the information including the plurality of attributes regarding the executable or deriving a signature from a combined set of attributes including attributes from each of the executables. As a result, applicants respectfully submit that Claim 21 is allowable. Applicants further submit, as discussed above, that the Office Action has not established a *prima facie* case of obviousness with regard to combining the teachings of McCaleb et al. and Kidder et al.

Applicants further submit that the claims dependent from Claim 21 in this group of claims, namely, Claims 25-30, are also allowable for at least the same reasons that Claim 21 is allowable.

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Claim 38 of this group of claims is a further independent claim that reads as follows:

38. A method of evaluating the status of an application or a service located on a plurality of computers on a network, comprising:

accessing stored information regarding the application or service for each of the plurality of computers, the stored information comprising a signature derived from a subset of attributes of the application or service; and

evaluating the signatures to determine status of the application or service for each of the plurality of computers.

While, arguably, McCaleb et al. teaches accessing stored information, the stored information does not comprise a signature derived from a subset of attributes of an application or service for evaluating the signatures to determine the status of the application or service for each of a plurality of computers. McCaleb et al. has nothing whatsoever to do with signatures, as far as applicants have been able to determine. While, arguably, Kidder et al. does disclose the generation of signatures, applicants submit that the Office Action has not established a *prima facie* case of obviousness as required by 35 U.S.C. § 103(a). In effect, the Office Action is using forbidden hindsight reasoning based on the present application, not the teaching of the references, as a basis for arguing that the claimed subject matter is obvious. Applicants respectfully disagree and submit that Claim 38 is clearly allowable in view of the teachings of McCaleb et al. and Kidder et al.

Claim 39, which depends from Claim 38, is submitted to be allowable for at least the same reasons as Claim 38 is submitted to be allowable.

Claims 2-4, 11-20, 22-24, and 31-37

As noted above, Claims 2-4, 11-20, 22-24, and 31-37 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable, in view of the teachings of McCaleb et al., taken

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in view of the teachings of Kidder et al., and taken further in view of the teachings of Wong et al. Applicants respectfully disagree.

Of this set of claims, Claims 2-4 depend directly from Claim 1 and Claims 22-24 depend directly or indirectly from Claim 21. As a result, these claims are submitted to be allowable for at least the same reasons as the claims from which they depend are allowable. As a result, these claims will not be further discussed.

Since Claims 31-37 have been canceled, those claims will also not be discussed. Of the remaining claims, Claim 11 is the only independent claim. As amended, Claim 11 reads as follows:

11. A computer-readable medium having stored thereon a data structure, comprising:

 a first data field representing information about an application or service on a computer, the information including a plurality of attributes regarding the application;

 a second data field representing a signature derived from a subset of the attributes of the application or service; and

 a third data field representing a second signature for a second subset of the attributes of the application or service.

In essence, Claim 11 is previously presented as Claim 14 in independent form, since the subject matter of Claim 14 has been added to Claim 11 and Claim 14 has been canceled. Applicants respectfully submit that none of the references relied on by the Examiner, McCaleb et al., Kidder et al., or Wong et al., taken alone or in combination, teaches the subject matter of Claim 11, as amended. None of the references taken alone or in combination teaches a (second) data field representing a signature derived from a subset of the attributes of an application or service, much less a further (third) data field representing a second signature for a second subset of the attributes of an application or service. As a result, applicants respectfully submit that

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Claim 11 is clearly allowable. Applicants further submit that all of the claims remaining in this application that depend from Claim 11, namely, Claims 12, 13, 15, 16, 18, 19, and 20, are also allowable for the reasons that Claim 11 is allowable.

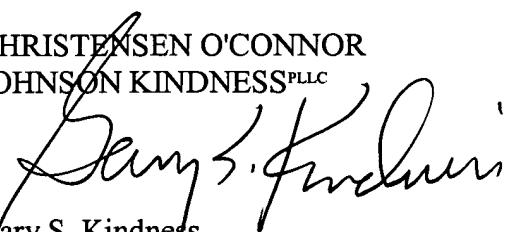
Applicants further submit that the Office Action has not established a *prima facie* case of obviousness with regard to combining the teachings of Wong et al. with either Kidder et al. or McCaleb et al. There is simply no teaching in the references that suggests combining the individual teachings of these references in any manner, much less the manner recited.

Conclusion

In view of the foregoing, applicants respectfully submit that all the claims remaining in this application are clearly allowable in view of the teachings of the cited and applied references. Consequently, early and favorable action allowing these claims and passing this application to issue are respectfully solicited. If the Examiner has any further questions, the Examiner is invited to contact applicants' attorney at the number set forth below.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

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